

RELease 1.0

formerly The Rosen Electronics Letter

84-2

February 22, 1984

THE SOUND OF MUSIC

Lotus has done it again. Its new product, Symphony, will create a whole new set of metaphors. We can hear it now: "Well, as far as I'm concerned, _____ is just amateur, a barbershop quartet." "_____ is an aria, brilliant, but not integrated with anything else." Come on, let's give it a try: The PFS series is a high school choir, serviceable, comprehensible, not too fancy. WordStar is a baroque opera; VisiOn Word is chamber music; TK!Solver is elegant computer music; most of what's downloaded on The Source is amateur piano recitals.

Symphony itself is a fitting follow-on to Lotus 1-2-3, but it doesn't yet make Lotus into a true two-product company: It's a product extension, not a line extension. Like the success of Windows for Microsoft, that of Symphony is almost assured as long as Lotus doesn't do something foolish.

The product is neatly priced so as not to roil the waters for 1-2-3. It's a broadening more than a deepening; in other words, you don't need to **outgrow** 1-2-3 to graduate to Symphony; you just need to want word processing or communications.

However, Symphony does have a nice new feature, a not totally compatible extension of its macro capabilities called "learn," which allows programming by example (RELease 1.0, November 28, page 6), so that a user can create and reuse sequences of keystrokes. In addition, Symphony includes a full-fledged command language that enables users (or third parties) to create their own applications using the Symphony tools.

Much of 1-2-3's success has been due to its ready adoption by third parties, whether training firms, high-end dealers, template builders, or simply standard-setting large accounts. Its very complexity created an opportunity third parties were eager to exploit, because the solutions to its difficulties opened up a world of powerful capabilities. Symphony shares that character, but more so. Those people who have learned to use Lotus -- those with a vested interest, in essence -- will take to Symphony with enthusiasm.

The marketplace

Competitively, Symphony doesn't change the status quo much. While it's a necessary leap forward for Lotus Development, it simply lets the company maintain its lead

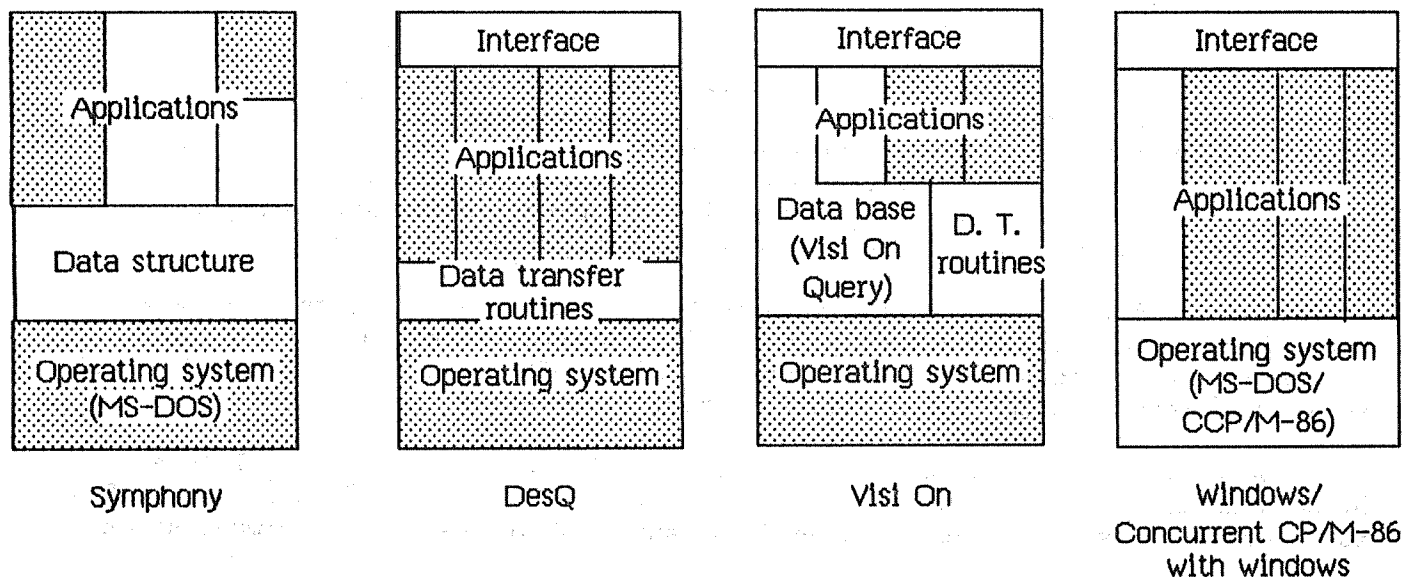
CONTENTS

THE SOUND OF MUSIC	1
Mixed metaphors.	
IBM I & II	4
Compaq: Be prepared!	
Network news.	
FORTUNE SYSTEMS	7
Round two.	
RELease 0.5: HALF-BAKED NEWS	8
VisiSuit, License me.	
RELease 1.5: AFTERTHOUGHTS	10
Internetworkx, MS-Mouse, Forum.	

in the ever-shifting marketplace. In other words, Symphony was a straightforward next step for Lotus, not a startling revelation. It's what we **expected** from Lotus, given its exemplary record so far. What is Symphony's impact on other would-be vendors of "integrated software"? The actual impact is slight, but those who were hoping to find chinks in Lotus' armor are now disappointed.

(text continues below)

Selected IBM PC Operating Environments



The diagrams above show four types of operating environments (loosely defined) for the PC from, respectively, Lotus, Quarterdeck, VisiCorp, and Microsoft or Digital Research. The light areas show facilities provided by the vendor in question; the shaded areas show "opportunities" for third-party vendors. (Apologies to Apple's hardware-included Lisa and Macintosh, which are closest to Visi On but without the data base management system.)

Symphony and the operating environments in context

When VisiCorp dropped the price of the Visi On applications manager (but not the applications without which the manager is useless) from \$495 to \$95, Lotus' stock, as they put it in the trade, "reacted," falling from \$38 to \$33. We could discuss the differences between 1-2-3/Symphony and Visi On all day, but the fact remains that someone who buys one is not much of a candidate to buy the other. Microsoft Windows, on the other hand, is fairly complementary to 1-2-3/Symphony, although ideally the buyer of Symphony should have all his "productivity" (not production) needs met by Symphony and add-ons and thus have little use for Windows, which would enable him to link to other programs.

In a few words, Windows is an operating environment, Visi On is an operating/development environment with applications, DesQ is an interface with a set of data transfer routines, and Symphony is an application with development facilities. (See across.) Windows is open to almost all comers as far as applications go, and stays out of their way as much as possible. Visi On provides both an interface and development facilities, plus its own applications; the idea is for Visi On Query also to support a host of outside applications. Symphony seemingly provides the equivalent of Visi On minus the user interface and dbms, but is positioned differently -- as an application. Yet Lotus is encouraging third parties to build add-ons into (onto?) Symphony, using the existing facilities of Symphony as components, thus positioning Symphony as an application **foundation** -- albeit one restricted by its speedy in-memory design to limited amounts of data.

The aim is to get people to build add-ons and interfaces for Symphony, thus using the product as a base for a vast array of products tailored to smaller niches of users with specialized needs, whether industry-specific, graphics-intensive, or whatever. Other third parties may concentrate on making the product "friendlier," whether by adding explanatory material or by masking some of its power. The wheel we aim to avoid reinventing used to be the operating system; now it's the application foundation.

Can Lotus pull this off? Consider this: In the year since the product has been shipping, 1-2-3 has garnered approximately 200,000 users (shipments plus illicit copies minus dusty licit copies lying unused). That's piddling compared with users of an operating system, but most OS users do not so define themselves: They'd sooner say, Yes, I use SuperCalc, or WordStar, or whatever. Only two micro applications so far have served as much of a development foundation: 1-2-3, mostly in prospect, and dBASE II, with some 200,000 users and 10,000 "consultants." While neither of these products constitutes an "environment" or provides an interface as the terms are generally used, both are familiar to a significant number of users and, more importantly, to thousands of system builders.

A second thought

The bad news is that Symphony, by virtue of its very power, is complex. (So is life.) One can argue endlessly about the virtues of the power-user market over those of the dumb-user market, but it's clear that the dumb-user market, still relatively unsaturated, is growing faster than the power-user market. Symphony and its ilk serve the dumb-user market only in "runtime" mode, where they form the basis of tailored applications custom-designed by consultants, dp departments, mentors, et al. Where's the IBM product, in Apple's words, for "the rest of us?" (Ovation, perhaps?) It takes a smart programmer to make a simple product: What the world needs is not symphonies, but melodies simple enough for anyone to whistle.

THE IBM ENVIRONMENT: MARKETPLACE, NOT SOFTWARE

It's a truism that IBM is not the competition, but the environment in which pretenders to market leadership must operate. We look here not so much at the environment, as at the companies within it.

COMPAQ: Be prepared

Right now, everyone is worried about Compaq because of the recent announcement (February 16) of IBM's own portable. Industry chitchat has it that Compaq will be hardest hit -- and so it will, to the extent that it has the most to lose. (TeleVideo, Eagle, Columbia, Corona, et al. have less far to fall.) For an equivalent configuration (except for Compaq's higher-resolution screen), Compaq is priced about \$400 higher than the IBM portable; IBM's own PC is priced about \$300 higher.

But Compaq's appeal has always been more than just portability or even price. The company has done an impressive job in its first year, lining up a solid array of some 1000 dealers, most of whom also carry the IBM line, and beating IBM to the punch both with a luggable (Compaq's first product) and a hard-disk pc, announced last fall and shipping in volume now. (We have one, fully paid for.) The Compaq machine is one of the least-discounted products around. Compaq's pitch to its dealers has been: "We love you, and we'll never go around you. Whatever IBM does, you can always count on us; we won't betray you." Customers like Compaq: It fulfills the promise of letting them swap disks with the PC easily. Indeed, recognition is great; the product is great; the only problem has been the unwillingness of people to buy from a start-up in these days of shake-outs and fold-ups. Compaq is attempting to cure that with a new flight of ads stressing the company's stability rather than the product's features. Much like Amdahl, whose salesmen's white shirts are always even brighter than IBM's and whose offices are an oasis of ties and jackets in the Silicon Valley sartorial desert, Compaq is trying to "out-serious" IBM.

However, it's reasonable to assume that Compaq has something more than class up its sleeve, for instance, perhaps, a flat-panel-display machine that would be genuinely portable even by 105-pound weaklings. Compaq has three divisions -- office computers, advanced computers, and portable computers -- of which only the last is yet shipping product. Compaq's next products should arrive well before the PC Portable comes off allocation and will be reassuring to investors, but they won't help the problem that companies make their money off their last few sales, and IBM's new "portable" is likely to cut sharply into Compaq's incremental sales. For the next few months, however, demand will exceed supply. (Indeed, we have to wonder why IBM is bringing out both the luggable and the PCjr at a time when chips are in short supply and the company could presumably make more from each 8088 by selling it within a full-fledged PC or XT. Presumably, it has something to do with "pre-emptive strikes," and with cultivating software. Lotus, among others, has been talking about putting 1-2-3 into ROM for use in portables.)

On beyond the PC as we know it today

Yes, IBM's portable is a blow for Compaq, in the stock market especially, but the more interesting question -- assuming Compaq can navigate this one -- is what happens when (if) IBM announces its own proprietary-operating-system PC? Moreover, the issue of compatibility itself may also be shifting from mostly

hardware to mostly software. In the long run, much new software will be written for environments, obviating the need for complete compatibility. (However, simultaneously we're likely to see more and more software hardened into ROM, as with the Macintosh.)

The jury's still out on the "IBM standard" issue: Can IBM make something a standard without a chorus of third-party knockoffs? Or do standards such as MS-DOS and UNIX truly belong to the industry, created only by the joint efforts of more than a single company?

We suspect that not even IBM itself knows for sure what creates a standard. Certainly its first moves in the proprietary-PC direction -- as inaugurated by the XT/370 (disregarding the now moribund 5100, Displaywriter and Datamaster (2300) series) -- have been tentative and ineffectual. We think it's likely that IBM will get proprietary in distribution -- as indicated by its limited marketing of the PC-3270 and the XT/370 -- faster than it gets so in products, whether hardware or (windowing) environments. (But consider the PC Cluster, discussed on page 6). This indicates that there may well be an opportunity for a company such as Compaq to fill the holes in the IBM retail line for a dealer attempting to compete with IBM in selling to large accounts.

Thus Compaq's strategy from here on out gets more interesting. Compaq's interest in compatibility has always been in compatibility with "the industry standard," not with the IBM PC per se. The aim is not to imitate IBM, but to have ready access -- give the user ready access -- to that huge software base. (The alternative is to do what many other vendors are now doing: Bundle in specially-configured versions of several top packages, in effect limiting the customer's choice to those packages and a few others specially rewritten.)

So the question is, Does Compaq continue merely to adhere to standards? Or does it imitate IBM products, standard or no, to give its dealers ammunition to fight IBM's proprietary-distribution proprietary products? (This very action could help such products to become standards.)

The company has, in fact, hired 40 software engineers (out of a total of 130 R&D people) and is quite prepared to do some systems software as well as hardware design of its own if need be. While we have no knowledge of such goings-on, we'd guess the company is also working on the 80186, 80286, and the CMOS 80386. Many of those software R&D types have a good working knowledge of UNIX. Moreover, Compaq has been graphics-oriented from the beginning, offering graphics as a standard rather than (like IBM) as an option. Compaq, thus, is well-prepared for windows, Windows, and whatever else may come down the pike.

How realistic is it to think that being prepared is sufficient? If you look at the business of PCM disk drives and mainframes and the like, the argument isn't convincing; companies like Amdahl and Storage Tech have had their good years, but IBM has always kept them on the brink of penury.

But now in the PC market we're not dealing with just price-performance; we're dealing with end-user software interfaces. Technology may lead; people very definitely lag. When it's a case of user-interface software, the pace slows down to accommodate change-averse, slow-to-learn end-users. Perhaps the relevant comparison is not to Storage Tech and Amdahl at all, but rather to Cullinet, which has long managed to compete successfully in selling its friendlier, better-designed IBM-equivalent software at prices higher than IBM's.

IBM ENVIRONMENT, PART II: Network news

Just in time for the second half of 3Com's roadshow, IBM last week announced the Personal Computer Cluster, an AppleBus-like, low-speed network scheme for the PC -- the jr, the senior, the XT and the portable version too. The PC Cluster uses the same topology (a bus) and access scheme (CSMA/CA, or collision sense, multiple access/collision avoidance) as Ethernet, but runs at just a little more than one thirtieth of its speed despite a price around \$500 per node. This is not the long-awaited token-ring net, which we expect around mid-year, but rather a low-end, it-may-not-be-fancy-but-it-works solution to the connection "problem."

There are three interesting aspects to this network. One: How open is it? Can Compaq (see page 4), for example, hook into it? Or does the necessary ROM upgrade (except for the XT and some newly-built PCs) provide IBM an easy way of making all the compatibles suddenly incompatible? We suspect that as usual it will require a little extra engineering on the part of the compatibles to hook into the Cluster, giving IBM another half-year or so jump on the competition.

Two: The existence of this net turns the PCjr into a nice, cheap little 128K diskless PC terminal that can sit on the network and use central files, thus making sense out of IBM's strategy of selling the jr through NAD and NMD as well as at retail.

The bystanders

Three: What does this baby network mean for everyone else?

It's probably most upsetting for **Corvus** and **Nestar** and others whose networks are being sold widely at retail as low-end solutions. Their comeback, of course, is that they can handle more than just IBM nodes.

For **3Com**, selling its 10Mbps Ethernet solution, PC Cluster will divert demand, but its very existence (yes, we've heard this one before but sometimes it's true) will probably create more demand than it satisfies. Moreover, once users have tried PC Cluster, they'll be easy to wean to the stronger stuff of Ethernet. Moreover, 3Com offers software on top of its hardware; Ashton-Tate's multi-user dBASE II, for example, uses file-locking routines embedded in the 3Com system that it would have to develop itself to work on the PC Cluster net.

For **Apple**, it's IBM's expensive answer to the virtually free AppleBus, another sally in the feature-matching war.

For other pc vendors, PC Cluster is a spur for them to develop their own networks, as **TeleVideo**, **DEC** and **Altos**, among others, have already done. **HP** and **TI** have announced agreements with 3Com, presumably for higher-end solutions, but aren't shipping yet.

For disk and drive suppliers, the arrival of PC Cluster is disheartening news, as is the advent of networking in general. The use of diskless PCjrs and shared hard disks is a handy way to cut costs -- and to slow (not reverse) the growth of the disk and drive businesses. On the other hand, the possibility of sharing a hard disk enhances its value to the user, offsetting this phenomenon at least in part for vendors of hard (but not floppy) drives.

"Software, software, my kingdom for some software!" For software vendors, PC

Cluster is either a call to action or a vindication. **Ashton-Tate**, for one, has just announced a multi-user version of dBASE II; while it probably won't work (without tinkering) over the PC Cluster, it puts A-T in the forefront of the trend, along with **VisiCorp**, which announced multi-user VisiCalc and VisiWord, also with 3Com, earlier this year. Then there's **SofTech Microsystems** with Liaison, a network operating system that links a variety of computers (Apples, PCs, etc.), and **Digital Research** with SoftNet. At last the network vendors will be able to demonstrate something other than those ubiquitous electronic mail packages on their systems.

For the **network business in general**, PC Cluster is just a little tweak of the curtain, whetting appetites for the Real Thing from IBM. Once that's out, we'll all be able to compare it with Ethernet and get busy either imitating or competing.

FORTUNE SYSTEMS: ROUND TWO

Ex-Xerox PARCers are all the rage throughout the Valley. Hardware and software companies -- Adobe, Apple, Convergent, GRiD, Metaphor (co-founder), Microsoft (north of the Valley), Oracle, 3Com (founder), VisiCorp, even Digital Equipment's new local research center -- are hiring them with abandon, hoping to ingest some of the Star magic for their own products. Fortune Systems of Redwood City, CA, by contrast, has brought in Jim Campbell, 56, and Bob Ruebel, 42, from the business side of Xerox, hoping to turn around a company that started with a little too much magic and a little too little performance.

Fortune now looks in fairly good shape, with \$55 million in liquid assets and total liabilities (no long-term debt) of only \$13.5 million, due to its public offering for \$90 million net last March. It has a UNIX product that (finally) works, and revenues (\$12.6 million) that turned up in the fourth quarter after a long slide. Losses are down: \$6 million in the fourth quarter, from a peak of \$9 million in the third.

When Campbell, who can't resist a challenge, arrived as president in December after retiring from the presidency of Xerox's Shugart in July, his first order of business was to make sure the product worked. It did, owing to some enhancements announced in October but overshadowed by the simultaneous, tumultuous departure of founder Gary Friedman. Next, Campbell tended to little cost-saving measures like making sure that defective materials were returned to vendors for credit rather than allowed to sit on the loading dock gathering dust. Then, he repopulated the company's decimated management: He brought in a chief financial officer from Tymshare, replacing one who left back in October, and a manufacturing man from Memorex. He lured Ruebel from Xerox as senior vp of marketing, and former dealer (and IBM and Xerox man) Tom Allen as vp of product marketing (read dealer support).

Except for the minor recognition that UNIX is not a retail product (IBM watchers, take heed!), there's little change in strategy. The company's OEM and direct customers, notably Ford's engineering operations, can be resold one-on-one, but the reseller community needs a marketing, not just a selling, job.

So the trick now is to turn around the dealer community that has soured on Fortune since its glory days just a year ago. First, the number of resellers will be pared down from 500, of which many were inactive retail dealers, to about 250 value-added dealers, to which the company hopes to add in due course. To help this effort along, Campbell has scheduled 93 ads (many of them three-pagers) to run in dealer publications over the next month and a half. Third-party software will also be encouraged, adding to some 80 third-party vendors already supporting several hundred programs. (As an attendee at a Fortune training class 18 months ago, we get mailings from these people; volume seems to have picked up lately.)

Fortune hasn't won anything yet other than the chance to play a second round, but that's more than some companies ever get.

RELease 0.5: HALF-BAKED NEWS**VisiSuit: A pox on both their houses!**

We had hoped to refrain from comment on the altercations between Software Arts and VisiCorp, but the dispute is heating up to the point that it's tough to ignore. We regret the newly fractious nature of the software business and we don't presume to judge the merits of either side's complaints: Both probably have some foundation in charging that the other paid too much attention to, respectively, TK!Solver and Visi On, and too little to the enhancement and marketing of VisiCalc. But we feel that the dispute is over an egg-laying goose that is already dying, and this will only hasten the process.

It's hard to credit Software Arts' implicit contention that it could make more by marketing the product itself than the 35.7 percent plus of revenues it receives from VisiCorp. Even if its claims that it can outsell VisiCorp prove true, it will have to bear heavy start-up costs for new packaging, advertising, and the establishment of distribution channels broader than those of TK!Solver. Indeed, we expect the opposite -- that if Software Arts does in fact attempt to sell the product in competition with VisiCorp, most resellers will simply throw up their hands in confusion. Confronted with the choice between VisiCorp's VisiCalc and Software Arts' VisiCalc, they will likely choose Neither of the Above, and settle on Multiplan, 1-2-3, SuperCalc or whatever.

License me

What's a gem worth if you can't sell it? What's software worth if it runs on only one kind of hardware? Does proprietary software -- the Mac operating system, say, or TI's Natural Language system -- enhance the value of one's hardware? Or does keeping such software proprietary rather than licensing it to/for other manufacturers unduly limit the returns one can generate from it?

Assessing such trade-offs is a problem facing every vendor of hardware who comes up with something unique. When it's something uniquely good, as in the two cases that follow, the answer is of general interest.

We've seen comment (Electronic News, Computer Systems News) that Apple is considering licensing the Mac OS to AT&T. This strikes us as a little far-fetched; it's like pointing out to the elephant the path you intend to walk on yourself. On the other hand, it would make a lot of sense for Apple to license the Mac system to some complementary manufacturers: those addressing particular vertical markets, say, or selling directly to the Fortune 10^x with value-added software and support. Right now, given its focus on retail, those are markets Apple generally doesn't reach, and it would be nice to seed them with some other makers' macs.

Meanwhile, we hear Texas Instruments is on the verge of announcing third-party availability of its Natural Language development system (RELease 1.0, February 22, 1983). This system allows a user to generate natural-language queries specific to an underlying data base (managed by the Oracle dbms) through menu selections. We've seen the product and we intend to write more in praise of it later. Basically a text program written under MS-DOS, it will of course work nicely on the IBM PC. Presumably, this toolkit is something IBM itself, as well as various third parties, could resell through its various distribution channels.

RELease 1.5: AFTERTHOUGHTS**MS-Mouse**

In our December 32 issue we referred to "the 'Microsoft' mouse (from Alps)." The mouse is indeed Microsoft's, although built by Alps, with a design by Raleigh Roark. One of its versions, not yet shipping, has the patented characteristic of "parasitism:" It can draw its power from the computer itself over an RS-232 port (which isn't built to allow this), and thus does not need its own power supply.

Internetwork

We're sad to report that the Internetwork start-up, described in such anticipatory detail in our issue of December 12, has fallen through. Basically, the deal was premised on the finding of a suitable chief executive officer and the achievement by the constituent retailers of substantive profits during the Christmas season. Neither of these came through.

The "meaning" of all this, as we see it, is that retail is not as profitable as it's commonly made out to be. Lots of retailers don't value their inventory properly and are probably losing money even as they think they're making it. Those that do do their accounting properly -- among them the would-be joiners in Internetwork -- frequently find that if they stay in the business it will have to be for love, not money.

Forum proceedings

Dear Juan & Alice,

The Forum was lots of fun. As usual, it was more than just the sum of its panels; each attendee made his own event through encounters with friends, enemies, competitors, customers, as well as the formal sessions. Rather than do a Forum roundup -- which would be tough because it expressed "the mood of the industry," which is inchoate and yet ever more diverse -- we'll simply work on getting the transcripts out faster than last year's (a fairly safe goal!).

RELease 1.0, published by Rosen Research Inc., 200 Park Avenue, New York NY 10166, (212) 586-3530. Esther Dyson, Editor-in-Chief. Subscriptions \$395 per year in the U.S. and Canada, \$475 per year elsewhere. The information and statistical data contained herein have been obtained from sources which we believe to be reliable but are in no way warranted by us as to accuracy or completeness. We do not undertake to advise you as to any change in figures or our views. Rosen Research Inc., its affiliates, and any officer, director or stockholder thereof or any member of their families, may have a position in and may from time to time purchase or sell securities of one or more of the companies referred to in RELease 1.0, or securities of their competitors, or perform services for, or engage in business with, one or more of such companies. Copyright © 1984 by Rosen Research Inc. All rights reserved. The title RELease 1.0 is a trademark of Rosen Research Inc. Nothing that appears in RELease 1.0 may be reproduced in whole or in part without permission of Rosen Research Inc.

SUBSCRIPTION FORM

Please enter my subscription to **RELease 1.0** at the rate of \$395 per year in the U.S. and Canada. Overseas subscriptions are \$475, airmail postage included. Multiple-copy rates on request. Subscriptions are available on an advance payment basis only.

Name _____

Title _____

Company _____

Address _____

City _____

State _____

Zip _____

Telephone _____

Please send payment and this form to: Rona Levine
Rosen Research Inc.
200 Park Avenue
New York, NY 10166